

REMARKS

Claims 1-2 are pending and stand ready for further action on the merits.

The specification has been amended to clarify the scope of component (C).

Support for the amendment to claim 1 can be found in cancelled claim 10. Support for the amendment to claim 9 can be found on page 27, line 15 to page 28, line 2.

No new matter has been added by way of the above-amendment.

Interview

Applicants note with appreciation that the Examiner has conducted a telephonic Interview with Applicants' representative on October 7, 2002. The Examiner indicated that there was an error in the listing of claims under rejection in the third paragraph of page 3 of the outstanding Office Action. The rejection incorrectly includes claims 1-6, 8 and 10. The Examiner stated that the **correct** claims under rejection are 1-6, 8 and 9 over Hasedawa et al. US 5,440,100.

Applicants will accept the rejection over Hasedawa et al. in relation to claims 1-6, 8 and 9. The applicant will continue to prosecute claims 1-6, 8 and 9 over Hasedawa et al. in relation to the rejection over Hasedawa et al. US 5,440,100.

Issues under 35 U.S.C. 112, second paragraph

Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Applicants respectfully traverse the rejection.

The Examiner objects to the scope of the terms "olefin-based thermoplastic elastomer" and "styrene-based thermoplastic elastomer". The Examiner finds that these terms are defined on pages 27 and 28 to include possible copolymers that are not art-recognized as being encompassed by these terms.

In response, Applicants have amended the specification at pages 27-28 and claim 9 to clarify the possible copolymers that are encompassed by these terms. Each of these terms are now defined to include only art recognized (co)polymers.

In view of the above amendments and comments, Applicants respectfully submit that the claims particularly point out and distinctly claim the subject matter that Applicants regard as the invention. As such, withdrawal of the rejection is respectfully requested.

Issues under 35 U.S.C. 112, first paragraph

Claim 9 is rejected under 35 U.S.C. 112, first paragraph. Applicants respectfully traverse the rejection.

The Examiner has taken the position that claim 9 lacks written description support. Specifically, the Examiner states:

"Apparatus for preparing a thermoplastic polyethylene, polypropylene, polybutene-1, butadiene, styrene, and ethylene copolymer composition, comprising a reactor, a feed inlet, a feed outlet, a product outlet, and a product inlet, wherein the reactor is a stirred reactor, and the feed inlet is a feed inlet for a feed stream, and the product outlet is a product outlet for a product stream."

In response, Applicants have amended claim 1 to recite that when component (B) is the olefin-based thermoplastic elastomer, component (C) is at least one selected from the group consisting of ethylene-propylene copolymer, ethylene-propylene-5-ethylidene norbornene copolymer, ethylene-propylene-5-methyl norbornene copolymer, ethylene-propylene-dicyclopentadiene copolymer, ethylene-butene copolymer and ethylene-octene copolymer; and when component (C) is the styrene-based thermoplastic elastomer, component (C) is at least one selected from the group consisting of styrene-butadiene block copolymer, styrene-isoprene block copolymer, hydrogenated styrene-butadiene block copolymer, and hydrogenated styrene-isoprene block copolymer. Since **there is clear support on page 27, line 15 to page 28, line 2**, Applicants respectfully submit that the inventors were in possession of the presently claimed invention at the time of filing. As such, withdrawal of the rejection is respectfully requested.

Hasegawa et al. - U.S. Patent 5,550,190

Claims 1-6, 8 and 9 are rejected under 35 U.S.C. 102(b) as anticipated by, or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hasegawa et al. Applicants respectfully traverse the rejection.

In view of the above amendment, incorporating the subject matter of claim 10 into claim 1, Applicants respectfully submit that this rejection is rendered moot.

Statz - U.S. Patent 5,889,114

Claims 9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Statz. Applicants respectfully traverse the rejection.

This rejection is confusing to Applicants, since each of claims 9 and 10 depend from claim 1, and yet claim 1 is not currently under rejection. Applicants will now assume that claim 1 is also under rejection over Statz.

Applicants respectfully submit that the presently claimed thermoplastic elastomer composition is neither anticipated nor rendered obvious over the teachings of Statz.

Statz teaches a thermoplastic elastomer composition comprising a polyether, a polyester, and a polyether ester. The present invention is directed to a thermoplastic elastomer composition comprising a polyether, a polyester, and a polyether ester.

Applicants note that it is impossible to correlate component (a) of Statz with inventive component (A), and to correlate component (a) of Statz with the inventive component (B). However, Applicants respectfully submit that the skilled artisan would not correlate component (b) of Statz with the inventive component (C). The Examiner cites the exemplified embodiments of Statz disclosed in Tables V, VI, VIII, IX, X and XII for teaching the inventive thermoplastic elastomer composition. In Tables V, VI, VIII, IX, X and XII of Statz, the acid-containing ethylene copolymer is a copolymer of ethylene and acrylic acid. Thus, it appears that the Examiner is correlating the acid-containing ethylene copolymer of Statz with the inventive component (C).

In response, Applicants have amended the present specification at pages 27-28 to clarify that when inventive component (C) is an olefin-based thermoplastic elastomer, it is at least one selected from the group consisting of ethylene-propylene copolymer, ethylene-propylene-5-ethylidene norbornene copolymer, ethylene-propylene-5-methyl norbornene copolymer, ethylene propylene-dicyclopentadiene copolymer, ethylene-butene copolymer, and ethylene-octene copolymer.

Since Statz fails to teach a polymer having the inventive component (C) as the thermoplastic component, it is significant that Statz teaches a thermoplastic elastomer which is a copolymer of ethylene and acrylic acid. This is in complete contrast to the present invention, which is a copolymer of ethylene and an olefin. Applicants respectfully submit that the Examiner's correlation

is neither anticipated nor rendered obvious by the prior art. As the MPEP directs, all the claim limitations must be taught or suggested by the prior art to establish a *prima facie* case of anticipation or obviousness. See MPEP §§ 2141 and 2143.03. Accordingly, withdrawal of the rejection is respectfully requested.

Conclusion

In view of the above amendments and comments, Applicants respectfully submit that the claims are in condition for allowance. However, in the event that the Examiner finds to the contrary, Applicants respectfully request that the Examiner enters this Amendment into the official record, to place the claims into better form for appeal.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Garth M. Dahlen, PhD. (43,575) at the telephone number of the undersigned below.

Please note that the extension of time fees are enclosed with the Notice of Appeal which is being filed today, February 14, 2000. Accordingly, **no extension of time fees are necessary** in connection with this Amendment.

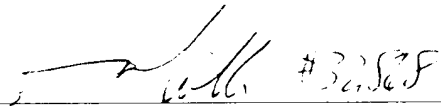
Attached hereto is a marked-up version of the changes made to the application by this Amendment.


If necessary, the Commission is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 2-244- for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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Attachment: Version with Markings to Show Changes Made

rubber; silicone rubber; nitrile rubber; fluoro rubber; and urethane rubber. Among these elastomers, particularly, [butin based] Olefin based elastomers and styrene-based elastomers are preferred because of being able to provide an elastomer composition having excellent moldability, rubber elasticity and scratch resistance. Particularly preferably, when an olefinic elastomer of an ethylene- α -olefin copolymer having 20% by weight or more of an α -olefin, and a styrene-based elastomer obtained by hydrogenating a styrene-diene block copolymer are used as component (C) of the present invention, can be obtained a thermoplastic composition having further excellent strength and oil resistance.--

The paragraph on page 28, line 21 to page 29, line 8 has been amended as follows:

--As commercially available products of the above described olefinic elastomer, "Thermorun" produced by Mitsubishi Kagaku K.K., ["Milastomer" produced by Mitsui Sekiyukagaku Kogyo K.K. (Mitsui Petroleum Chemical Industry K.K.),] "Sumitomo TPE" produced by Sumitomo Kagaku K.K., ["Santoprene" produced by AES K.K.,] "Enics" produced by Dow Chemical K.K. can be mentioned. As commercially available products of the above described styrene-based elastomer, "Natsyn" produced by Asahi Kasei K.K., "Edulac" produced by Mitsui Petrochemical K.K., "Polysar" produced by Sanyo Chemical K.K., "Natsyn" and "Hydrotac" produced

IN THE CLAIMS:

Claim 10 has been canceled.

The claims have been amended as follows:

1. (Amended) A thermoplastic elastomer composition comprising the following components (A), (B) and (C):

(A) 100 parts by weight of a thermoplastic polyester elastomer;

(B) 3 to 100 parts by weight of a modified olefin resin having an epoxy group or a derivative group thereof in its molecule; and

(C) 10 to 900 parts by weight of a rubbery elastomer selected from the group consisting of an olefin-based thermoplastic elastomers and styrene-based thermoplastic elastomers; and

wherein the component (C) is not vulcanized.--

2. Amended: The thermoplastic elastomer composition according to claim 1,

styrene-based elastomers, polyisoprene, natural polyisoprene, polybutadiene and polystyrene, natural rubber, smekelata, acryl rubber, chloroprene rubber, silicone rubber, nitrile rubber, fluorine rubber, urethane rubber, and hydrogenated products thereof] ethylene-propylene copolymer, ethylene-propylene-5-ethylidene norbornene copolymer, ethylene-propylene-5-methyl norbornene copolymer, ethylene-propylene-dicyclopentadiene copolymer, ethylene-butene copolymer and ethylene-octene copolymer; and

wherein the styrene-based thermoplastic elastomer component (C) is at least one selected from the group consisting of styrene-butadiene block copolymer, styrene-isoprene block copolymer, hydrogenated styrene-butadiene block copolymer, and hydrogenated styrene-isoprene block copolymer.